

What is claimed is:

1. An image recording apparatus comprising:
a recording head for recording an image, said
5 recording head having plural recording elements arranged
along a first direction, said recording head moving
relatively to a recording material to record a test pattern
in a margin of said image;
detection means for detecting said recorded test
10 pattern;
a test pattern analyzer for analyzing signals from
said detection means, said test pattern analyzer
calculating deviation in relative movement or relative
speed of said recording material or said recording head;
15 and
a correction means for correcting said relative
movement or said relative speed on the basis of said
deviation calculated by said test pattern analyzer.
- 20 2. An image recording apparatus as recited in claim
1, wherein said test pattern includes a first check pattern,
said first check pattern comprises plural first check lines
recorded by driving the same recording device at
predetermined time intervals on the basis of predetermined
25 drive signals, while said recording material is relatively
moved to said recording head,
and wherein said test pattern analyzer measures distance
between said first check lines to determine deviation in
said relative movement or said relative speed.

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3 . An image recording apparatus as recited in claim
1 , wherein said test pattern includes a second check pattern,
said second check pattern comprises plural second check
lines recorded by driving the same said recording device
5 for predetermined time on the basis of predetermined drive
signals, while said recording material is relatively moved
to said recording head,
and wherein said test pattern analyzer measures the length
of said second check line to determine deviation in said
10 relative movement or said relative speed.

4 . An image recording apparatus as recited in claim
1 , wherein said test pattern includes at least one of a
faulty recording device check pattern, a calibration
15 pattern, and a solid fill check pattern.

5 . An image recording apparatus as recited in claim
1 , wherein said test pattern is recorded in a margin provided
between said images recorded continuously.

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6 . An image recording apparatus as recited in claim
1 , wherein said test pattern is recorded in a margin provided
between said image and a side edge of said recording
material.

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7 . An image recording apparatus as recited in claim
1 , further comprising:
a head carriage for carrying said recording head in
a second direction orthogonal to said first direction; and
30 a recording material feeding device for feeding said
recording material in said first direction, said image being

serially recorded by repeating to carry said carriage and to feed said recording material by use of said recording material feeding device.

5 8. An image recording apparatus as recited in claim 1, further comprising:

10 a recording material feeding device for feeding said recording material in a second direction orthogonal to said first direction, said image being linearly recorded by repeating or carrying out at the same time to record said image in said first direction and to carry said recording material in said second direction.

15 9. An image recording apparatus as recited in claim 8, wherein said recording head moves in said first direction for a pixel-offset.

20 10. An image recording apparatus as recited in claim 8, wherein said recording head moves in said first direction to record said image, said first check patterns, or said second check patterns in an area between said image and the lateral edge of said recording material.

25 11. An image recording apparatus as recited in claim 1, wherein said detection means is a camera for taking an image of said test pattern.

12. An image recording apparatus as recited in claim 1, further comprising:

30 a material cutter for cutting said test pattern recorded in said margin of said image; and

a guide member for guiding said test pattern cut by
said material cutter to a waste material box.